

WHAT IS CLAIMED IS:

1. A method of operating a memory circuit, comprising the steps of:
applying a first voltage to a power terminal of a memory cell having a first and a second
5 data terminal;
storing a data bit in the memory cell while the power terminal receives the first voltage;
applying a second voltage different from the first voltage to the power terminal;
applying a third voltage to the first and second data terminals while the power terminal
receives the second voltage; and
10 applying the first voltage to the power terminal.
2. A method as in claim 1, comprising the step of removing the third voltage from the first and
second data terminals.
- 15 3. A method as in claim 1, wherein the step of applying the third voltage comprises activating
a wordline.
4. A method as in claim 3, wherein the step of applying the third voltage comprises activating
a control signal.
20
5. A method as in claim 1, comprising the steps of:
detecting a control signal at the memory circuit;
waiting for a grace period after the step of detecting; and
applying the second voltage and the third voltage in response to the step of waiting.
25
6. A method as in claim 5, wherein the grace period is determined by counting a
predetermined number of clock cycles.
7. A method as in claim 1, comprising the steps of:
30 detecting a control signal at the memory circuit; and

applying the second voltage and the third voltage in response to the step of detecting.

8. A memory circuit, comprising:

an array of memory cells arranged in rows and columns, each memory cell having a power
5 terminal, a control terminal, a first data terminal, and a second data terminal;
a plurality of bitline pairs, each bitline pair coupled to respective first and second data
terminals of each memory cell in a respective column of memory cells.

a plurality of wordlines, each wordline coupled to a control terminal of a respective row of
memory cells;

10 a row counter circuit coupled to receive a clock signal, the row counter circuit producing a
sequence of row address signals in synchronization with the clock signal and in response to a
control signal; and

a row decoder circuit coupled to a plurality of wordlines and coupled to receive the
sequence of row address signals.

15

9. A memory circuit as in claim 8, comprising a clock counter circuit coupled to receive the
clock signal, the clock counter circuit producing the control signal after a grace period.

10. A memory circuit as in claim 9, wherein the grace period corresponds to a number of clock
20 cycles.

11. A memory circuit as in claim 8, wherein a processor produces the control signal after a
grace period.

25 12. A method of operating an electronic device, comprising the steps of:

applying a first voltage to a first part of the electronic device;
applying a second voltage to a second part of the electronic device;
changing the first voltage to a third voltage different from the first voltage while
maintaining the second voltage;

applying a fourth voltage to the first part of the electronic device while maintaining the second voltage;

removing the fourth voltage from the first part of the electronic device; and
changing the third voltage to the first voltage while maintaining the second voltage.

5

13. A method as in claim 12, wherein the first voltage is equal to the second voltage.

14. A method as in claim 12, wherein the first voltage is a power supply voltage and the third voltage is ground.

10

15. A method as in claim 12, wherein the first part of the electronic device is a memory array and the second part of the electronic device is a peripheral circuit.

16. A method as in claim 12, comprising the steps of:

15

detecting a control signal at the electronic device;
waiting for a grace period after the step of detecting; and
changing the first voltage to the third voltage in response to the step of waiting.

17. A method as in claim 16, wherein the grace period is determined by counting a predetermined number of clock cycles.

20

18. A method as in claim 12, comprising the steps of:

detecting a control signal at the electronic device; and
changing the first voltage to the third voltage in response to the step of detecting.

25

19. A method as in claim 12, wherein the electronic device is a wireless telephone handset.

20. A method as in claim 12, wherein the electronic device is a computer.

30

21. A method as in claim 12, wherein the electronic device is a video game.

22. A method as in claim 12, wherein the first voltage is an array supply voltage and wherein the first part is a memory array.
- 5 23. A method as in claim 12, wherein the second voltage is a peripheral supply voltage and wherein the second part is a peripheral circuit.
24. A method as in claim 23, wherein the peripheral circuit is a row decoder circuit.
- 10 25. A method as in claim 12, wherein the third voltage is ground.
26. A method as in claim 12, wherein the fourth voltage is a precharge voltage.
27. A method as in claim 12, wherein the step of applying the fourth voltage comprises
15 activating a wordline and wherein the step of removing the fourth voltage comprises inactivating the wordline.